

Reexamination and reconsideration of the application, as amended, are respectfully requested.

Applicants respectfully traverse the rejections of the claims under 35 U.S.C. §§ 102(b) and 103(a), insofar as they apply to the present claims, and reconsideration is requested.

Applicants respectfully traverse the rejection of claims 1, 19, and 20 under 35 U.S.C. § 102(b) as anticipated by Nelson. Nelson fails to show every element of the present invention as recited in claims 1, 19, and 20.

Claims 1 and its dependent claims 19 and 20, each recite *inter alia* the following elements:  
an etch bath having a bubble plate, and  
a glass substrate etched to reduce a thickness of the glass substrate.

Nelson neither shows nor teaches an etch bath, a bubble plate, etching a glass substrate, etching to reduce a thickness of a substrate, or any combination of these elements in claims 1, 11, 19, and 20. Moreover, Nelson teaches away from these features as recited in claims 1, 11, 19, and 20 in the present application. In the final Office Action, the Examiner asserted that

Nelson discloses an etching process in which the etched product ( col. 4, line 38) is covered with an aqueous liquid and the . . . solids are removed from the etcher 2 . . . . The etcher 2 can be a spray etcher which would inherently have nozzles. The nozzles may entrain air or gas such as nitrogen in the flow of the etchant or act as a sparger creating bubbles. (col. 4, lines 40-41) Etchable material reads on glass substrate.

Office Action, Paper No. 14, at 2.

First, Examiner's application of the etcher disclosed in Nelson as an anticipating reference under 35 U.S.C. § 102(b) for an etch bath as claimed in the present invention is inconsistent with the argument that "[t]he etcher 2 can be a spray etcher." As mentioned, the apparatus of the present invention specifically recites an etch bath, not a spray etcher. Although Applicants understand that the Examiner is interpreting the spray etching taught in Nelson as anticipating the bubble plate of the

present invention, it is improper to interpret the § 102(b) in a manner that contradicts a claimed element (e.g., etch bath) of the rejected claim. By asserting Nelson as a § 102(b) reference for the etch bath of the present invention, while at the same time asserting “[t]he etcher 2 can be a spray etcher,” the Examiner is improperly arguing anticipation by equivalents. See Titanium Metals Corp. v. Banner, 778 F.2d 775, 227 USPQ2d (Fed. Cir. 1985); Richardson v. Suzuki Motor Co., Ltd., 868 F.2d 1226, 9 USPQ2d 1913 (Fed. Cir. 1989), cert. denied, 493 U.S. 853 (1989).

Second, Nelson specifically discloses that “[t]he invention relates to chemical etching of material, often from a substrate . . .” Nelson, col. 1, lines 9 - 11 (emphasis added). It is clear from Nelson that the invention described therein is for removing materials that have been applied to the substrate, not for thinning the substrate by etching. Nowhere does Nelson disclose or even imply the etching of a substrate itself, and as such, it cannot be said to anticipate an apparatus that reduces a thickness of a substrate by etching.

Finally, Applicants have amended Claim 1 to recite the immersion of the glass substrate in the etch bath. Nelson does not teach or suggest etching of any material--substrate or other--by immersing the material in an etch bath.

Applicants respectfully traverse the rejection of claims 2, 7, and 10 under 35 U.S.C. § 103(a) as being unpatentable over Nelson in view of Tittle. As discussed above, Nelson neither teaches nor suggests the following elements of the present invention as recited in independent claims 1 and 10:

an etch bath having a bubble plate, and

etching a glass substrate to reduce a thickness of the glass substrate.

Tittle discloses only a chemical bath process control system, and describes none of the elements of the present invention that Nelson fails to teach. Thus, none of these references, singly or combined,

Finally with respect to the rejection of claims 2, 7, and 10 under 35 U.S.C. § 103(a) as being unpatentable over Nelson in view of Tittle, Applicants have amended independent claims 1 and 10 to recite the immersion of the glass substrate in the etch bath. Nelson does not teach or suggest etching of a substrate by immersing the substrate in an etch bath.

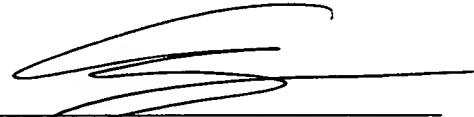
Claims 3 - 6, 8 - 9, and 11 - 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nelson in view of Jones et al., and Tittle. Applicants respectfully traverse the rejection. Claims 3 - 6, 8 - 9, and 11 - 18 are allowable over the cited references in that these claims recite, in varying degrees of specificity, a combination of features including an etching apparatus for etching a glass substrate comprising an etch bath having a bubble plate. Jones et al. does not teach a bubble plate as recited in independent claims 1 and 11. Furthermore, as discussed above, Nelson neither teaches nor suggests etching a glass substrate as claimed in the present invention.

Applicants believe the foregoing amendments place the application in condition for allowance and early, favorable action is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Washington, D.C. telephone number (202) 624-1250 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

Respectfully submitted,

LONG ALDRIDGE & NORMAN, LLP



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Song K. Jung  
Registration No:35,210  
Attorney of Record

Sixth Floor  
701 Pennsylvania Avenue, N.W.  
Washington, D.C. 20004  
Telephone No: (202) 624-1200  
Facsimile No: (202) 624-1298